

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/912,628

DATE: 08/02/2001

TIME: 11:00:45

Input Set : A:\PT001PCT seqlist 07262001.txt

Output Set: N:\CRF3\08022001\I912628.raw

PS

2 <110> APPLICANT: <110> Ni et al.  
 4 <120> TITLE OF INVENTION: Human Serpin Polynucleotides, Polypeptides, and Antibodies  
 6 <130> FILE REFERENCE: PT001P2  
 C--> 8 <140> CURRENT APPLICATION NUMBER: US/09/912,628  
 9 <141> CURRENT FILING DATE: 2001-07-26  
 11 <150> PRIOR APPLICATION NUMBER: PCT/US01/02484  
 12 <151> PRIOR FILING DATE: 2001-01-26  
 14 <150> PRIOR APPLICATION NUMBER: 60/178,769  
 15 <151> PRIOR FILING DATE: 2000-01-28  
 17 <150> PRIOR APPLICATION NUMBER: PCT/US00/05082  
 18 <151> PRIOR FILING DATE: 2000-02-29  
 20 <160> NUMBER OF SEQ ID NOS: 17  
 22 <170> SOFTWARE: PatentIn Ver. 2.0  
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 26 <211> LENGTH: 733  
 27 <212> TYPE: DNA  
 28 <213> ORGANISM: Homo sapiens  
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 32 aattcgaggg tgcaccgtca gtcttcctct tcccccaaaa acccaaggac accctcatga 120  
 33 tctcccggaac tctgaggtc acatgcgtgg tggtagacgt aagccacgaa gaccctgagg 180  
 34 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240  
 35 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300  
 36 ggctgaatgg caaggagtac aagtgcagg tctccaacaa agcctccca acccccatcg 360  
 37 agaaaaccat ctcaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420  
 38 catcccgga tgagctgacc aagaaccagg tcagcctgac ctgcttggtc aaaggcttct 480  
 39 atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540  
 40 ccagcctcc cgtgctggac tccgacggct ccttcttct ctacagcaag ctaccctggt 600  
 41 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggtcttgc 660  
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 43 gactctagag gat  
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 47 <211> LENGTH: 1710  
 48 <212> TYPE: DNA  
 49 <213> ORGANISM: Homo sapiens  
 51 <400> SEQUENCE: 2  
 52 gcagggtca ccaaccatgc aaggacaggg caggagaaga ggaacctgca aagacatatt 60  
 53 ttgttccaaa atggcatctt acctttatgg agtactcttt gctgttgcc tctgtgctcc 120  
 54 aatctactgt gtgtcccgga ccaatgcccc cagtgcatac ccccgccctt cctccacaaa 180  
 55 gagcaccctt gctcaccagg tgtattccct caacaccgac tttgccttcc gcctataccg 240  
 56 caggctgggt ttggagaccc cgagtcagaa catcttcttc tccctgtga gtgtctccac 300  
 57 ttccctggcc atgtctctcc ttggggccca ctcagtcacc aagaccaga ttctccaggg 360  
 58 cctgggcttc aacctcacac acacaccaga gtctgccatc caccagggct tccagcacct 420  
 59 ggttcaactca ctgactgttc ccagcaaaga cctgaccttg aagatgggaa gtgccctctt 480  
 60 cgtcaagaag gagctgcagc tgcaggcaaa tttcttgggc aatgtcaaga ggctgtatga 540  
 61 agcagaagtc ttttctacag atttctccaa cccctccatt gccaggcga ggatcaacag 600  
 62 ccattgtgaaa aagaagacc aagggaaggt tgtagacata atccaaggcc ttgaccttct 660

Does Not Comply  
Corrected Diskette Needed

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63 gacggccatg gttctggtga accacatttt ctttaaagcc aagtgggaga agccctttca 720
64 ccctgaatat acaagaaaga acttcccatc cctggtgggc gagcaggcca ctgtgcatgt 780
65 ccccatgatg caccagaaag agcagttcgc ttttgggggtg gatacagagc tgaactgctt 840
66 tgtgctgcag atggattaca agggagatgc cgtggccttc tttgtcctcc ctagcaaggg 900
67 caagatgagg caactggaac aggccttgtc agccagaaca ctgagaaagt ggagccactc 960
68 actccagaaa aggtggatag aggtgttcat ccccagattt tccatttctg cctcctacaa 1020
69 tctggaaacc atcctcccga agatgggcat ccaaaatgtc tttgacaaaa atgctgattt 1080
70 ttctggaatt gcaaagagag actccctgca ggtttctaaa gcaaccacaa aggctgtgct 1140
71 ggatgtcagt gaagagggca ctgaggccac agcagctacc accaccaagt tcatagtccg 1200
72 atcgaaggat ggcccctctt acttcactgt ctcttcaat aggaccttcc tgatgatgat 1260
73 taaaaataaa gccacagacg gtattctctt tctagggaaa gtggaaaatc ccactaaatc 1320
74 ctagggtgga aatggcctgt taactgatgg cacattgcta atgcacaaga aataacaaac 1380
75 cacatccctc tttctgttct gagggtgcat ttgacccagc tggagctgga ttcgctggca 1440
76 gggatgccac ttccaaggct caatcaccaa accatcaaca gggacccagc tcacaagcca 1500
77 acaccatta accccagcgt gtgccctttt ccacaaatc tcccaggtaa ctagtctcat 1560
78 gggatgttgc tgggtttacca tatttccatt ccttggggct cccaggaatg gaaatacgcc 1620
79 aaccagggtt aggcacctct attgcagaat tacaataaca cattcaataa aactaaaata 1680
80 tgaattcatc tgtcaaaaaa aaaaaaaaaa 1710
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84 <211> LENGTH: 1632
85 <212> TYPE: DNA
86 <213> ORGANISM: Homo sapiens
88 <400> SEQUENCE: 3
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90 cgcaacctgg aactgggcct cacacagggg agttttgcct tcatccacaa ggattttgat 120
91 gtcaaagaga ctttcttcaa tttatccaag aggtattttg atacagagtg cgtgcctatg 180
92 aattttcgca atgcctcaca ggccaaaagg ctcatgaatc attacattaa caaagagact 240
93 cgggggaaaa ttcccaaact gtttgatgag attaatcctg aaaccaaatt aattcttgtg 300
94 gattacatct tgttcaaagg gaaatggttg accccatttg accctgtctt caccgaagtc 360
95 gacactttcc acctggacaa gtacaagacc attaagggtg ccatgatgta cagtgcaggc 420
96 aagtttgctt ccacctttga caagaatttt cgttgctcat tccctcaaact gccctaccaa 480
97 ggaaatgcca ccatgctggt ggtcctcatg gagaaaatgg gtgaccacct cgcccttgaa 540
98 gactacctga ccacagactt ggtggagaca tggctcagaa acatgaaaac cagaaacatg 600
99 gaagttttct ttccgaagtt caagctagat cagaagtatg agatgcatga gctgcttagg 660
100 cagatgggaa tcagaagaat cttctcacc ctttctgacc ttagtgaact ctcagctact 720
101 ggaagaaatc tccaagtatc cagggtttta caaagaacag tgattgaagt tgatgaaagg 780
102 ggactgagg cagtggcagg aatcttgtca gaaattactg cttattccat gcctcctgtc 840
103 atcaaagtgg accggccatt tcatttcatg atctatgaag aaacctctgg aatgcttctg 900
104 tttctgggca ggggtggtgaa tccgactctc ctataattca ggacacgcat aagcacttcg 960
105 tgctgtagta gatgctgaat ctgagggtatc aaacacacac aggataccag caatggatgg 1020
106 caggggagag tgttcctttt gttcttaact agtttagggg gttctcaaat aaatacagta 1080
107 gtccccactt atctgagggg gatacattca aagaccccca gcagatgcct gaaacgggtg 1140
108 acagtgtctg acctatata ttttttttcc tacacataca tacctatgat aaagtttaat 1200
109 ttataaatta ggcacagtaa gagattaaca ataataacaa cattaagtaa aatgagttac 1260
110 ttgaacgcaa gcactgcaat accataacag tcaaaactgat tatagagaag gctactaagt 1320
111 gactcatggg cgaggagcat agacagtgtg gagacattgg gcaaggggag aattcacatc 1380
112 ctgggtggga cagagcagga caatgcagaa ttccattcca ctactcagaa tggcatgctg 1440
113 cttaagactt ttgagattgt tatttctgga atttttcatt taatgttttt ggaccatggt 1500
114 tgaccatggt taactgagac tgcagaaagc aaaaccatgg ataaggagag actactacaa 1560

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115 aagcattaaa ttgatacata ttttttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
116 aaaaaaaaaa aa 1632
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121 <212> TYPE: DNA
122 <213> ORGANISM: Homo sapiens
124 <220> FEATURE:
125 <221> NAME/KEY: SITE
126 <222> LOCATION: (635)
127 <223> OTHER INFORMATION: n equals a,t,g, or c
129 <220> FEATURE:
130 <221> NAME/KEY: SITE
131 <222> LOCATION: (655)
132 <223> OTHER INFORMATION: n equals a,t,g, or c
134 <400> SEQUENCE: 4
135 ggcacgagct tcgctcctgg gcagctgcgc ggagaactgg ggctcaccgt catggatgct 60
136 ctatcagaag caaatggcac atttgcatta aaccttttga aaaagctagg ggaaaacaac 120
137 tcaaacaact ttttttttcc cccatgagca tatcatcagc cttggccatg gttttcatgg 180
138 gggcaaaggg aaacactgca gctcagatgt ctcaggcact ttgttttagt aaaatcggag 240
139 gtgaagatgg agatattcat cgaggttttc agtcacttct tgttgcaatt aacagaactg 300
140 aactgaata tgtgcttaga actgccaacg ggctctttgg agaaaagtct tatgatttcc 360
141 tcacaggttt tacagattcc tgtggcaaat tctaccaagc aacgataaaa cagctagact 420
142 ttgtgaatga tacagagaag tccacaacac gtgtaaactc ctgggttgct gataaaacta 480
143 aagcctggaa aattattcaa acaagcctgt cacatctgga ggagccagga atcgctctt 540
144 cctcttgta ctgcaaagcc tgcctttcac agcccctact ggttcaactct attcccaaat 600
145 gcaactctcc tgtgaccccg catggcatgt ggtgncctcc ctccctgtga gcagntgtga 660
146 ctaataaact gccgccaatt tcactgttaa aaaaaaaaaa aaaaaa 706
149 <210> SEQ ID NO: 5
150 <211> LENGTH: 435
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
154 <400> SEQUENCE: 5
155 Met Gln Gly Gln Gly Arg Arg Arg Gly Thr Cys Lys Asp Ile Phe Cys
156 1 5 10 15
158 Ser Lys Met Ala Ser Tyr Leu Tyr Gly Val Leu Phe Ala Val Gly Leu
159 20 25 30
161 Cys Ala Pro Ile Tyr Cys Val Ser Pro Ala Asn Ala Pro Ser Ala Tyr
162 35 40 45
164 Pro Arg Pro Ser Ser Thr Lys Ser Thr Pro Ala Ser Gln Val Tyr Ser
165 50 55 60
167 Leu Asn Thr Asp Phe Ala Phe Arg Leu Tyr Arg Arg Leu Val Leu Glu
168 65 70 75 80
170 Thr Pro Ser Gln Asn Ile Phe Phe Ser Pro Val Ser Val Ser Thr Ser
171 85 90 95
173 Leu Ala Met Leu Ser Leu Gly Ala His Ser Val Thr Lys Thr Gln Ile
174 100 105 110
176 Leu Gln Gly Leu Gly Phe Asn Leu Thr His Thr Pro Glu Ser Ala Ile
177 115 120 125
179 His Gln Gly Phe Gln His Leu Val His Ser Leu Thr Val Pro Ser Lys

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180      130      135      140
182 Asp Leu Thr Leu Lys Met Gly Ser Ala Leu Phe Val Lys Lys Glu Leu
183 145      150      155      160
185 Gln Leu Gln Ala Asn Phe Leu Gly Asn Val Lys Arg Leu Tyr Glu Ala
186      165      170      175
188 Glu Val Phe Ser Thr Asp Phe Ser Asn Pro Ser Ile Ala Gln Ala Arg
189      180      185      190
191 Ile Asn Ser His Val Lys Lys Lys Thr Gln Gly Lys Val Val Asp Ile
192      195      200      205
194 Ile Gln Gly Leu Asp Leu Leu Thr Ala Met Val Leu Val Asn His Ile
195      210      215      220
197 Phe Phe Lys Ala Lys Trp Glu Lys Pro Phe His Pro Glu Tyr Thr Arg
198 225      230      235      240
200 Lys Asn Phe Pro Phe Leu Val Gly Glu Gln Val Thr Val His Val Pro
201      245      250      255
203 Met Met His Gln Lys Glu Gln Phe Ala Phe Gly Val Asp Thr Glu Leu
204      260      265      270
206 Asn Cys Phe Val Leu Gln Met Asp Tyr Lys Gly Asp Ala Val Ala Phe
207      275      280      285
209 Phe Val Leu Pro Ser Lys Gly Lys Met Arg Gln Leu Glu Gln Ala Leu
210      290      295      300
212 Ser Ala Arg Thr Leu Arg Lys Trp Ser His Ser Leu Gln Lys Arg Trp
213 305      310      315      320
215 Ile Glu Val Phe Ile Pro Arg Phe Ser Ile Ser Ala Ser Tyr Asn Leu
216      325      330      335
218 Glu Thr Ile Leu Pro Lys Met Gly Ile Gln Asn Val Phe Asp Lys Asn
219      340      345      350
221 Ala Asp Phe Ser Gly Ile Ala Lys Arg Asp Ser Leu Gln Val Ser Lys
222      355      360      365
224 Ala Thr His Lys Ala Val Leu Asp Val Ser Glu Glu Gly Thr Glu Ala
225      370      375      380
227 Thr Ala Ala Thr Thr Thr Thr Phe Ile Val Arg Ser Lys Asp Gly Pro
228 385      390      395      400
230 Ser Tyr Phe Thr Val Ser Phe Asn Arg Thr Phe Leu Met Met Ile Thr
231      405      410      415
233 Asn Lys Ala Thr Asp Gly Ile Leu Phe Leu Gly Lys Val Glu Asn Pro
234      420      425      430
236 Thr Lys Ser
237      435
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241 <211> LENGTH: 311
242 <212> TYPE: PRT
243 <213> ORGANISM: Homo sapiens
245 <400> SEQUENCE: 6
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247 1 5 10 15
249 Glu Thr Leu Ser Arg Asn Leu Glu Leu Gly Leu Thr Gln Gly Ser Phe
250 20 25 30
252 Ala Phe Ile His Lys Asp Phe Asp Val Lys Glu Thr Phe Phe Asn Leu

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253          35          40          45
255 Ser Lys Arg Tyr Phe Asp Thr Glu Cys Val Pro Met Asn Phe Arg Asn
256      50          55          60
258 Ala Ser Gln Ala Lys Arg Leu Met Asn His Tyr Ile Asn Lys Glu Thr
259 65          70          75          80
261 Arg Gly Lys Ile Pro Lys Leu Phe Asp Glu Ile Asn Pro Glu Thr Lys
262      85          90          95
264 Leu Ile Leu Val Asp Tyr Ile Leu Phe Lys Gly Lys Trp Leu Thr Pro
265      100          105          110
267 Phe Asp Pro Val Phe Thr Glu Val Asp Thr Phe His Leu Asp Lys Tyr
268      115          120          125
270 Lys Thr Ile Lys Val Pro Met Tyr Ser Ala Gly Lys Phe Ala Ser
271      130          135          140
273 Thr Phe Asp Lys Asn Phe Arg Cys His Val Leu Lys Leu Pro Tyr Gln
274 145          150          155          160
276 Gly Asn Ala Thr Met Leu Val Val Leu Met Glu Lys Met Gly Asp His
277      165          170          175
279 Leu Ala Leu Glu Asp Tyr Leu Thr Thr Asp Leu Val Glu Thr Trp Leu
280      180          185          190
282 Arg Asn Met Lys Thr Arg Asn Met Glu Val Phe Phe Pro Lys Phe Lys
283      195          200          205
285 Leu Asp Gln Lys Tyr Glu Met His Glu Leu Leu Arg Gln Met Gly Ile
286      210          215          220
288 Arg Arg Ile Phe Ser Pro Phe Ala Asp Leu Ser Glu Leu Ser Ala Thr
289 225          230          235          240
291 Gly Arg Asn Leu Gln Val Ser Arg Val Leu Gln Arg Thr Val Ile Glu
292      245          250          255
294 Val Asp Glu Arg Gly Thr Glu Ala Val Ala Gly Ile Leu Ser Glu Ile
295      260          265          270
297 Thr Ala Tyr Ser Met Pro Pro Val Ile Lys Val Asp Arg Pro Phe His
298      275          280          285
300 Phe Met Ile Tyr Glu Glu Thr Ser Gly Met Leu Leu Phe Leu Gly Arg
301      290          295          300
303 Val Val Asn Pro Thr Leu Leu
304 305          310
307 <210> SEQ ID NO: 7
308 <211> LENGTH: 215
309 <212> TYPE: PRT
310 <213> ORGANISM: Homo sapiens
312 <220> FEATURE:
313 <221> NAME/KEY: SITE
314 <222> LOCATION: (211)
315 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
317 <400> SEQUENCE: 7
318 His Glu Leu Arg Ser Trp Ala Ala Ala Arg Arg Thr Gly Ala His Arg
319 1          5          10          15
321 His Gly Cys Ser Ile Arg Ser Lys Trp His Ile Cys Ile Lys Pro Phe
322      20          25          30
324 Glu Lys Ala Arg Gly Lys Gln Leu Lys Gln Leu Ile Phe Phe Pro Met

```

ps →

Use of n and/or Xaa has been detected in the Sequence Listing.  
Review the Sequence Listing to insure a corresponding  
explanation is presented in the <220> to <223> fields of  
each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/912,628

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Input Set : A:\PT001PCT seqlist 07262001.txt

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L:8 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17